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Original Lectures.

ON DIABETES MELLITUS.

THREE LECTURES DELIVERED IN THE HAHNEMANN MEDICAL COLLEGE AND HOSPITAL OF CHICAGO, BY C. E. LANING, M. D., PROFESSOR OF THEORY AND PRACTICE, AND OF CLINICAL MEDICINE.

LECTURE I.

While diabetes is not generally classed among diseases of the liver, I feel that it is just as appropriate to treat it under this heading as any other. When we come to study the etiology of the disease and the nature and location of the lesions which give rise to it, we will see that it is decidedly more a hepatic than a renal disease. Indeed, it is almost never due to a renal lesion *per se*, but rather, whatever changes occur in the kidneys during the progress of the disease are secondary, and represent effects and not causes. This fact needs to be strongly emphasized, for the reason that too frequently physicians mistake all changes detected in the kidneys or urine for evidence of primary renal disease.

There are numerous lesions in various parts of the body which may give rise to diabetes. The ability to recognize these always assists materially in the selection of the curative remedy, and many times a cure cannot be made until

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the nature and location of that particular lesion is established. I will give cases illustrative of this before closing.

If the attempt be made to group the various etiological factors under certain definite headings it will be found that it can be done only to a limited extent. Thus a certain number of diabetic lesions owe their origin to traumatism, others to purely psychical influences; some again to the reflexes resulting from exposure of the skin to wet and cold, and a large number to reflexes from various portions of the organism, it being impossible in many instances to ascertain anything regarding the etiology of the lesion giving rise to the reflex diabetes. Many times the disease is the outgrowth of certain changes within the body which are of such a nature as to indicate a primary trophic lesion.

Cases resulting from traumatism may be due to variously located lesions, since, no matter what the nature of the traumatism, it is through the affection of some nerve centre near to or remote from the site of injury that gives rise to the diabetic complexus of symptoms. A blow over the liver, the kidneys, brain or spinal cord, or a general concussion of the whole body, may equally give rise to the disease, and the nerve centres affected in one case may be the same as those in another. Traumatic diabetes usually develops in a few hours after the reception of an injury, though exceptionally it may not show itself until weeks after, and this fact should be borne in mind when searching for the etiology of a given case. It is rarely that any serious injury or evidence of degenerative change occurs at the point where the traumatism was located. Thus a blow over the liver does not cause diabetes by virtue of its having produced any direct destruction of hepatic tissue, but simply by its reflex effect upon some nerve centre, which exerts a controlling influence over the glycogenic function of the liver. What is true in this case is equally so of all traumatic lesions, and it is to be distinctly understood that the diabetes is not due to destructive tissue changes taking place at the seat of the traumatism.

Beside the effects produced in the brain by psychical influences there are certain tangible lesions which may give rise to the disease under consideration, such as tumors, inflammatory states, softening and even persistent hyperæmia.

Lesions of the vagus, such as tumors of the same, or those due reflexly to pulmonary, gastric or intestinal disdisturbances, may set up a train of diabetic symptoms. Lesions of the generative intestine may give rise to this disease, and various disturbances of certain spinal and sympathetic nerves may do the same.

There is much evidence going to show that no matter *where* the lesion is, the proximate cause of diabetes is in the liver. This may not be apparent at first glance, or if it is believed without further evidence, it must not mislead you to attempt the cure of the disease by giving your remedies for the purpose of acting directly upon the liver, as crude pathological prescribing would cause you to do. Remember the disturbance of the liver is only the proximate cause, and is *always* only the *proximate*, never the primary. The primary cause is *always* in the nervous system, unless, indeed, we consider the agent giving rise to the traumatism which in turn developed the nerve lesion to be the primary cause.

It is not generally understood how cerebral lesions give rise to diabetes, and my statement that the liver is always involved may tend to mystify rather than make you clear on the subject. For this reason it may not be out of place to give more or less in detail the role played by the liver and the nervous system respectively, in the production of the various symptoms which stamp the case as one of diabetes.

I do not think any cerebral lesion can give rise to this disease unless it affects the medulla oblongata either by means of direct nervous communication or through interfering with its vascular supply, and hence causing nutritive disturbances.

I will now give you the anatomical and physiological points necessary to a proper understanding of how cere-

bral and other nervous lesions affect the liver in causing diabetes. At a point in the floor of the fourth ventricle midway between the origin of the auditory and pneumogastric nerves, there is a gray nucleus that gives rise to certain vaso-motor fibres which control the lumen of the vessels of the chylopoietic viscera.

In order to comprehend fully their action in the production of diabetes we must refer to some physiological points pertaining to the last-named viscera. Starch, in whatever food it may be found, undergoes a certain transformation in the intestine previously to being absorbed by the capillaries which ultimately merge into the portal vein.

The starch reaches the intestine with a chemical formula of $C^6H^{10}O^5$ where, through the action of certain digestive fluids, it is made to take on a molecule of water H_2O, giving us now a formula of $C^6H^{12}O^6$, in other words, glucose or grape sugar. This being carried to the liver by the route already described, is disposed of as follows: A portion of it, that which is needed to supply the various immediate demands of the system, passes on through the liver and hence through the hepatic vein into the inferior cava. Passing through the right heart, it is carried in the current of the blood through the lungs. During its passage through these organs a considerable portion of it is oxydized for the purpose of maintaining animal heat, and is thus re-converted into H_2O and CO_2, water and carbonic acid gas, the original inorganic elements from which it was evolved by the plant or vegetable in which it was first found. A considerable portion, however, of the sugar which enters the pulmonic circulation is not destroyed there, but reaches the systemic, and from thence is distributed to the various tissues demanding it. And before proceeding let me say that it is a physiological fact, that each individual cell of the body needs at least a single molecule of sugar in order that it may live and grow. This will throw light on some subsequent developments.

We must now return to the liver, where there is a large amount of freshly injested glucose to dispose of. In the

shape of glucose the liver cannot retain or store this substance, and as it is not all needed at once in the general circulation, something must be done with it till such time as it is required. The various cells of the liver are therefore, busily engaged in undoing apparently what the pancreas has done, namely in taking from the glucose a molecule of water; restoring once more the formula $C^6H^{10}O^5$, but this time it does not represent starch, but glycogen, a substance isomeric with starch and dextrine, which at the same time is capable of being stored up or retained by the hepatic tissue.

When a demand is sent from any part of the body for glucose, the liver adds a sufficient quantity of H_2O to its stored-up glycogen; in other words waters its stock to a degree sufficient to supply the demand.

We have now our physiological basis. Let us look on the pathological picture. To return to the vaso-motor nerves having origin at the point in the medulla already given, and which control the circulation of the chylopoietic viscera, we find that under certain conditions they very much accelerate the blood current, passing to the liver by way of the portal vein, and from it through the hepatic vein. The deduction to be made from this fact is, that the hepatic cells can only convert glucose into glycogen (the only form in which they can store it up for future demand) with a certain degree of rapidity, which does not correspond to the accelerated circulation; therefore, a much greater amount of sugar than is needed passes directly to the heart, thence to the lungs, where, as we have seen, a portion is oxidized; but in this case, so much more than there is any demand for passes into the systemic circulation that the kidneys, upon whom the duty devolves, are obliged to excrete a greater or less amount of sugar.

Let me here make a point in regard to the diabetes, or more properly speaking glycosaria, which occurs frequently in pneumonia, bad cases of pleurisy, in emphysema, and, in short, all lesions that diminish in a decided degree the respiratory capacity. This is due simply to the fact that the amount of glucose normally oxidized in the lungs cannot

be so changed and for obvious reasons ; hence an excess is thrown into the general circulation, and removed, as in the former instance, by the kidneys.

While the cerebral lesions which cause diabetes in the manner described are generally of a tangible nature, as tumors, softenings, etc., still there is another set of lesions far more subtle, which seem to produce the same effects, and to do so in virtually the same manner. These are the lesions due to psychical influences. This class of causes may be divided into those of sudden occurrence and immediate effect, as fright, anxiety, or anger: all of which emotions, I believe, produce pathological effects through their action upon that great emotional centre, the corpora quadrigemina; for lesions of it certainly produce symptoms almost or quite identical with those resulting from the above-named emotions.

In the second group may be found those causes which are more continuous, though slow in their action, as grief, care and solicitude. There are many cases on record in which this class of causes has played an important role. Thus, it is claimed that during the period of engrossing stock speculation in Berlin, a powerful influence was exerted in the production or aggravation of diabetes. In many instances there seems to be no ascertainable cause outside of that of severe and prolonged mental effort.

I have had under my care several cases in which polyuria was invariably caused in this way, disappearing without medication as soon as the destruction of cerebral tissue was lessened. Again, I have seen glycosuria make its appearance under similar circumstances, to be greatly diminished or entirely disappear when the mental strain was removed.

In several cases of polyuria from the cause just cited, I am satisfied that the difficulty was located in the corpora quadrigemina, and treatment based upon this view resulted in cure. Here it was certainly due to an abnormally sensitive state of certain portions of said bodies, which, during active mental work, accompanied by more or less business

worry, were rendered hyperæmic, and consequently irritated to a sufficient extent to stimulate their influence upon the kidneys to the degree spoken of.

Occasionally diabetes has almost seemed epidemic, or rather endemic, and a large number of cases have been known to suddenly develop after drenching in the rain, or getting the feet wet. Instances of this kind are cited by Oppolzer, Griesinger, Zimmer, Kuelz and Senator.

So far as my individual clinical experience goes, an attack of diabetes in which we can recognize a "drenching in the rain," or "getting the feet wet," as the principal exciting cause, is almost invariably a case of what may be termed "hepatic diabetes." I have observed that a large majority of patients who have had an attack of rheumatism, pneumonia, pleurisy or diabetes, caused apparently from getting the skin wet or cold, have had laying, more or less dormant, some hepatic derangement, generally of such natnre as to come under the heading of "abnormal disintegration;" and this condition may truly be looked upon as a strong predisposing cause of the diseases just mentioned. In all such cases, in the selection of the curative remedy, especial attention is to be given to the hepatic symptoms, and the prescription should be largely based upon them. The importance of restoring and preserving the hepatic function can scarcely be overestimated in such instances. So long as the liver is performing its function perfectly, getting wet is not at all liable to precipitate an attack of either rheumatism, gout, pneumonia, pleurisy, diabetes or dysentery, while, on the other hand, a deranged liver renders one liable to any one of these diseases from the cause just mentioned. Physiological and pathological facts can be brought forward to sustain these deductions.

That the liver is concerned in the production of diabetes can be demonstrated in several ways. Thus, if it has undergone fatty degeneration from phosphorus or arsenical poisoning, or other causes, irritation of the grey nucleus in the fourth ventricle will not give rise to glycosuria. The pancreas is diseased in a large number of cases of diabetes,

yet this cannot be looked upon as a cause, but rather as a concomitant.

Further evidence of the part played by the liver in the production of diabetes is shown by the fact that this disease is more prevalent among wealthy Jewesses than in any other race or class of society. The reason for this is that they, as a rule, are high livers, and but little accustomed to exercise. Another fact in the same direction is that "gouty and obese persons, especially those having much omental fat, are more liable to diabetes than are thin persons, who are more active."

It is easily apparent why wetting or chilling the skin may derange the liver, and hence develop or precipitate an attack of diabetes. The skin and the liver, as is well known, act complimentarily to each other, hence, when the activity of the skin is lessened by either of the above causes, the liver is at once overtaxed; and when I say the liver is overtaxed, it means the same as saying that the nerve centres controlling that organ are called upon for extra duty. As a consequence they become in some way deranged and this is made manifest by an abnormal action of the liver.

We have now, I think, laid a physiological and pathological foundation broad enough to sustain the diabetic superstructure which shall consist of the symptoms of that disease. But their consideration must be deferred to the next lecture.

LA GRIPPE.

A CLINICAL LECTURE DELIVERED IN THE HAHNEMANN MEDICAL COLLEGE OF CHICAGO, JANUARY, 8, 1890. By B. S. ARNULPHY, M. D., CLINICAL PROFESSOR OF PHYSICAL DIAGNOSIS.

The influenza or the "grippe," as you may prefer to call it, is *intra muros*, all silly denials to the contrary notwithstanding. As to its being the genuine imported article, there can be no question, although the general complexus of the epidemic is and bids fair to remain of a milder type than that which yet prevails on the other side of the Atlantic, its intensity having, as it were, been attenuated by the mighty expanse of the ocean.

The grippe is a true cosmopolitan and an accomplished traveler,—the Nellie Bly of disease. Technically, it is a pandemic, that is, an epidemic which finds itself at home under every clime, and is pleased to hob-nob with every nationality. It is no more Russian than British, German than French, Italian than Austrian, American than African or Asiatic. True enough it has been mostly observed to travel from the east westward; still, when the mood is on, it is just as liable to shape its course eastward, seemingly against the grain.

When, in December last, I told you that in a few weeks the epidemic would be in our midst, at the same time announcing this lecture as a proper greeting for it, some of you may have deemed the prediction a hasty one, inasmuch as the proper medical authorities of the city strenuously denied at the time the probability of any such event.

But I knew I could not be mistaken; the "grippe" being an old acquaintance of mine, with whose ways and whims I was already familiar. My first experience with it was in the South of France when I was yet a mere lad, and it prostrated me. Still, so strong is human propensity in shaking off unpleasant memories, that I would be unable to recall the prominent symptoms of the trouble, had I not since refreshed my memory by looking up the record. I find that it was a much more serious affair than the one now prevailing. Gastro-intestinal complications were "*a la mode*," often times assuming quite a typhoid character, and many cases of intestinal hemorrhage were noted.

In 1883 I witnessed an epidemic of "grippe" in Paris, and saw several hundred cases in the hospitals. This time the trend of the disease was toward the respiratory mucosa, and all degrees were to be found, from coryza to broncho-

pneumonia. I relate these facts in order to give you to understand that it is not always clad in the same array of symptoms. Out of the long list of outbursts of the disease on record since the one described by Mercado (in Spain), 1580, very few, I should think, could be shown to have assumed exactly the same type.

It is a capricious and versatile affection, and one that requires quite a little study, to be comprehended in its true light. But do not expect from me that I should expatiate in theoretical disquisitions about the disease. My object is simply to relate to you some of the cases that have come under my observation within the last two or three weeks. We may perhaps thereby be enabled to draw a few conclusions not devoid of clinical interest.

Case 1. December 28. Mr. M., 42 years old, had had irregular chills and fits of sneezing all day previous. I find him in bed, complaining of a dull headache, the pain extending to the back of the neck and down the spine. The nose is dry and the mucosa is so swollen that he cannot breathe through the nasal passages. Pulse 100, hard and full; temperature 102°.

The skin is dry and hot. The tongue is slightly coated. No malaise about the stomach, no thirst, no appetite; the bowels are regular. But what dominates the same is a fatigue and muscular weakness out of proportion to the other symptoms, and to the short duration of the disease. The patient feels drowsy most of the time. Aconitum was prescribed; I also directed that hot drinks should be given.

The next day, December 29, the patient feels easier. A watery discharge flows from the nostrils. In spite of the diminished pain, he feels low-spirited. Temperature 101°. Pulsatilla.

December 30. The weakness is still present, with a bruised feeling in the limbs, but all other febrile and catarrhal symptoms have subsided. The appetite is returning. Gelsemium.

This is a typical example of the light form of influenza that has been and is yet so prevalent in this community. Some of the lighter cases, where the febrile symptoms were less pronounced, no doubt were allowed to follow their course without any special care, or any supplementary precaution on the part of the bearers—a grievous mistake, indeed, as the slightest cold taken while in that debilitated condition is sure to lead to complications of a serious nature.

Case 2. Jan. 3. Mr. T. H. sends word that he suffers intense pain from rheumatism. On calling, I found the patient, a strong man of 34, flat on his back, complaining of severe pain in the head, especially over the eyes, spreading to the back, the limbs, in fact over the whole body, and aggravated by motion. He had had a chilly feeling for two days before. His temperature was pretty high, 102½°, and the skin felt dry and burning. The tongue was rather dry, but there was no thirst. The patient, an active business man, worried a great deal at the thought of being laid up for a month, if not more, with acute rheumatism.

Although persuaded that this case was one of the forms of the prevailing epidemic, I made sure of the diagnosis by examining the painful limbs, especially the joints. The muscles were sore to the touch. The joints exhibited no swelling nor redness, and the seat of the pain was plainly peri-articular, the synovial membrane showing no sign of involvement.

I likewise, by proper pressure, ascertained that the cephalagia was of a fibro-muscular order, arising manifestly from epicranial pains in the muscular layer of the integument.

Aconite and bryonia in alternation gave such relief that on the third day the patient had almost recovered, save for a marked weakness. No catarrhal symptoms of any kind had ever been noticeable in this case. It may be worth remarking that decided improvement in the articular pains began at the close of the second day of treatment, after a free perspiration had set in.

Case 3. Jan. 3. I am aroused at two o'clock in the morning to attend Mrs. R. M., who is said to be suffering with a severe attack of indigestion. I find the patient extremely restless, tossing about in her bed. She complains of a frightful pain at the stomach, with nausea. She had been feeling poorly since the morning, and had taken but little food. The pulse was flurried, but the temperature stood at 99½.

I give two large glasses of hot water, which are soon thrown up, carrying away quite a little bile. This seems to bring some relief. Ipecac. 6, two drops every fifteen minutes.

Later in the day she was much better. The nausea had subsided, but there remained some soreness at the epigastrium, extending now to the abdomen. There had been one diarrhœic discharge. Chamomilla 12.

January 3. The patient is languid and weak, but feels well otherwise.

Case 4. January 5. Miss A. H., has been suffering with an intense headache for the last three days. Yesterday she had quite a chill, but rode down town to her office-work as usual. To-day she feels utterly prostrated and complains of a severe pain at her stomach, and of a griping sensation in the intestines. Upon examination I noticed that not only is the epigastric region sore to the touch, but the hepatic region as well; in fact the whole abdominal surface. The stomach is manifestly dilated, and the abdomen shows signs of tympanitis. Since the early morning she has had watery and profuse stools. The face is flushed; the head and back are aching severely. Pulse 120, hard and small. Temperature, 103°. Aconite and colocynth.

January 6. The gastro-intestinal symptoms are somewhat better. The tympanitis has subsided to a marked degree. Seven watery passages since yesterday, attended with griping pain. The tongue is dry and reddish. The cephalalgia has been very intense at times, mainly during the night, which has been entirely sleepless. Temperature, 102°. Same remedies in the daytime, and belladonna at night.

January 7. The abdominal walls are now soft and yielding; all the painful symptoms have subsided save the headache. No stools since the early morning.

While percussing over the left hypochondrium I notice an abnormally wider zone of dullness at the seat of the spleen, which was evidently enlarged. Temperature 100°. Aconitum in the daytime, and belladonna at night.

January 8. An abundant perspiration has taken place during the night; the temperature is about normal. The headache and the backache are much better, but there is much pain about the knees and the ankles, aggravated by motion. Bryonia. Three days later the patient had resumed her work, though she still felt weak."

This case has this interesting feature about it that it plainly shows a peritoneal involvement which might have proved troublesome, as the fever ran high, and the nervous forces were at a low ebb. Colocynthis has to all appearances rendered good service here.

Another sign that the case was a serious one is afforded by the splenic enlargement, very likely of microphytic origin, plainly emphasizing the specific nature of the whole trouble.

Case 5. A curious case altogether was that of an elderly lady who does cashier work in a down-town concern. While figuring at her desk she felt a peculiar sense of helplessness steal over her ; the pen she held all at once seemed to have grown so heavy that she had to drop it, herself soon falling over the desk in a condition of utter prostration. I happened to be called in and I found her stretched upon an improvised couch, cold and motionless. Still, she could speak slowly and in a low voice, and this is about the way she described her feelings : "I don't seem to know whether I have a body or not. I have no pain whatever. Everything seems extinct about me save my brain. I only feel as if something cold were creeping up where I should judge my legs used to be. If this is death, it is not unpleasant. Doctor, I suppose it is an apoplectic stroke. Is there any hope ?" "As long as a woman can talk there is hope," said I ; "besides this is not a stroke, but the grippe, and in a few days you will be all right again." I knew there was no danger ahead from the feel of the pulse, which showed a rather slow but unimpaired circulation. I gave her conium mac. and she made a prompt recovery.

Many cases of infantile influenza have come under my observation of late, the ages of the children varying from six months to three years. A common feature with them has been the abruptness of the attack, marked by a rapid rise of temperature, ranging from 102° to 104½°. This elevation of temperature has been accompanied in two of the cases by tonic convulsions: in other cases by coma; in others, still, by gastro-intestinal derangement. Aconite was surely indicated and I gave it with confidence, alternating it with belladonna in the convulsive cases, with opium in those that were comatose, and with chamomilla in those that were enteric.

But whenever the thermometer showed more than 102½°, I used the bath and frequent lotions with acidulated water.

Case 6. Jan. 9. Last but not least in interest comes the case of Mrs. E., a young mother with a child 6 months old, whom she partly nursed up to the first days of her illness.

From the start, Mrs. E. has presented a full array of catarrhal symptoms—sneezing, lachrymation, sore throat, and a dry cough which, when I saw her, had become easier. She now raises, but with some effort, a grayish thick sputum. The first thing that attracted my attention was a

slight degree of dyspnœa. She could not lie in bed with comfort since the day before, and sat propped up with pillows. I immediately apprehended that some pulmonary complication was impending, and an examination of the chest only confirmed my suspicion. Small clusters of sibilant rales, with here and there a few fine bubbles of subcrepitant, were scattered over the lungs, especially at their base. If you remember what I told you about the clinical significance of these signs, you will readily conclude, as I did, that they pointed to an extension of the catarrhal process from the middle-sized bronchial tubes into the finer ones, threatening a further generalization, the possible invasion of the terminal bronchii, and even of the pulmonary alveoli.

Such is, in the great majority of cases, the course followed by the pathological process culminating in the alarming symptoms of capillary bronchitis and broncho-pneumonia. I shall have something to say, by and by, about the unusual severity of pulmonary complications originating in la grippe; but let us now proceed with our case.

The rate of the respiration was 27 per minute: not a distressing dyspnœa, by any means, but a very significant one. The temperature (102°) was sufficient evidence that the lung-parenchyma was not yet involved, but was mute with regard to the extent of the bronchial obstruction present or threatened, as capillary bronchitis is not necessarily attended with a high temperature.

It was the young lady's good fortune to have called in medical help in the nick of time, as any delay in the matter, or any error of diagnosis on the part of the physician, might have allowed her to drift into an irretrievable condition. Phosphorus and tartar emetic were prescribed.

The next day, Jan. 10, all danger had passed; the path of air in the minute tubes was cleared: almost no sibilance, or small bubbling, was anywhere to be detected by auscultation: the respirations had fallen to 19 per minute, and the expectoration was slightly muco-purulent, more abundant, and less troublesome. She is now on the road to a complete recovery.

I have given you this case in detail, as it very happily exemplifies both the natural trend of the catarrhal process in the disease that we are studying, as well as the prompt action of our remedies when they are properly selected and applied.

Such is, in the main, the physiognomy of the principal varieties of the prevailing epidemic as I have happened to observe them. If we were to classify them, I would suggest their division into three leading types: (1) *the catarrhal* or *naso-bronchial;* (2) *the neuro-muscular;* and (3) *the gastro-intestinal.*

Of course all the three types, or two only, may be blended together in the same subject, but it does not appear to be frequently the case in the present epidemic, the separation of the types being the rule. One feature only they have in common, namely, the thermic disturbance, preceded by a chilly disposition, and followed by a marked debility and depression of spirits.

The grippe may confine its external manifestations to one single symptom, apparently the most trifling of all, in reality the most serious when it prevails alone—I mean the sneezing. Rome has seen, during the seventeenth century, two or three epidemics marked by that redoutable peculiarity. People were siezed, without any warning, with fits of sneezing of such severity that in the course of an hour or two the victims died from sheer exhaustion. Hence, has arisen the curious custom, still in force all through Europe, which makes it a rule of social politeness whenever a person sneezes to greet the nasal explosion by some word of blessing or of well-wishing, such as "*Dieu vous bénisse!*" This means that there have been times when a sneeze was almost a sure sign of death, and it became the onlookers to pray for the poor soul.*

But there are other sub-varieties which our limited time precludes me from studying with you. You may readily form an idea of what they may be when you bear in mind that *all the mucous membranes* of the body may be invaded by the specific catarrhal process, and according as the main stress is laid on the conjunctiva, the pituitary, or the pharyngeal, laryngeal, bronchial, the gastro-intestinal, or the vesical and uterine mucous membranes, the disease assumes a very different appearance. In the case of a lady just now under my care the only symptoms are pains in the region of the bladder, with urgent and frequent desire to pass water, some headache and great restlessness, coupled with a general "gone" feeling. It is a clear case of vesical grippe, which is being rapidly disposed of by gelsemium and cantharis.

* One case of death from sneezing was reported in the papers a few days ago.

I remember having observed in Paris, 1883, the case of a young lady whose health and menstruation were perfect. Slight symptoms of grippe developed one morning when the period had just come on. A few hours later she experienced severe spasmodic pains in the region of the uterus, extending to the back and lower limbs; the flow ceased, and in its stead an abundant epistaxis took place, accompanied by a good deal of sneezing. Pulsatilla soon arrested both the vicarious hæmorrhage and the uterine pains.

Now, if we take a synthetical view of the clinical cases just given, you will perceive that its main force is spent upon the respiratory, the circulatory and the nervous systems. It is no longer the dread disease that it was in times gone bye; it has singularly lost its former severity by being wafted down to us through the ages. Nevertheless, it is apt to occasionally bloom out in some of its malignant forms, and it will then strike one or the other of the vital parts referred to above.

The circulatory apparatus betrays its distress in two ways: *First* by the fever which is rarely of itself a source of danger, except in small children. *Secondly* by heart-failure, which is not an infrequent occurrence with old and weakly people. The nervous centres are always more or less affected, their involvement finding expression through the general depression of the forces and the lowered tone of vitality. The pneumo-gastric may be either thrown into a high state of irritation, or so depressed as to threaten paralysis of the lung and stoppage of the heart.

But it is in complications arising from the pulmonary apparatus that the modern grippe seems to find the readiest means of multiplying its victims. One thing that strikes us, is that pulmonary difficulties are more liable to develop in those cases in which the catarrhal type is pronounced, as shown in Case 6. This does not mean, in any way, that the other types are free from such complications. Experience shows, on the contrary, that the thoracic determinations are frequently brought on by exposure, during convalescence, or while under the influence of the disease. But in the catarrhal type the danger may arise at the outset from the rapid development of suffocative catarrh or of adynamic pneumonia. Graves observed fatal cases where the only symptom was intense dyspnœa, resulting in speedy prostration and death, while post-mortem examination failed to reveal any tissue alteration. We think with the clinician, that death in those cases is due to a profound

perturbation in the vitality of the lungs, probably through paralysis of the vagus.

The most frequent thoracic complication of the grippé, however, is pneumonia. Now, we know that pneumonia is not a fatal disease. On the contrary, it generally evinces a strong natural tendency toward recovery. How is it then that most cases of grippal pneumonia are fatal? The reason is that it is not a purely inflammatory affection. It is essentially an adynamic condition, betraying with grim eloquence the profound poisoning of the nervous centres by some infectious agent. Nothing, to my mind, more powerfully depicts the infectious nature of the disease than the insidious evolution of this form of pneumonia. The violent chill that ushers in frank pneumonia in such an outspoken manner, is here absent or nearly so. Little or no pain in the side is present. The cough is hardly different from what it was at the onset; the sputa may preserve their indifferent catarrhal aspect, being of whitish or grayish color. One single flickering light is left to guide the practitioner, and that is the temperature. A rise of one degree or more in the course of a catarrhal attack of grippe, is almost a sure sign that pneumonia is knocking at the door.

The suspicion then becomes a certainty, if a few hours afterward dyspnœa has developed. At the same time you observe a marked alteration of the features, a peculiar drawn expression about the nose and lips; you find the pulse soft, rapid, fluttering. The danger is great in those cases; all may be over in from a few hours to two or three days.

If you examine the chest of that class of sufferers, you are likely to lose some of your faith in the value of physical signs. You will be struck by the instability of those signs, as they may shift about in the thorax. In some other cases you are apt to be confronted with all the external tokens of pulmonary distress, while your searching ear will be rewarded with a very meager harvest of stethoscopic signs. Still, in ordinary cases, when the nervous centres are moderately affected, we are able, by careful auscultation, to follow the extension of the catarrhal process from the large and middle-sized bronchii into the finer ones, as pointed out in Case 6. When bronchiolitis is thus at hand, it easily merges into alveolitis, and broncho-pneumonia is constituted. Everything now depends upon the vital resistance of the patient, upon the energy of his expiratory powers, as well as upon the integrity of the heart-muscle,

and of the vascular system. Any flaw in the machinery is apt to prove fatal.

You therefore perceive whence the prognostic indications are to be derived. As we observe it nowadays, the grippe is a disease of marked benignity on the whole, save that it tells heavily upon old people and valetudinarians. The diagnosis presents no difficulty whatever, as, during the prevalence of an epidemic, nothing is easier than to recognize the affection, even in the most *bizarre* cases. It must be conceded, however, that acute tuberculosis has many traits in common with such cases of the catarrhal form as drift into gradually developed bronchiolitis and broncho-pneumonia.

Even the stethoscopic signs may fail to yield any positive diagnostic inference; but a careful study of the march of the temperature, the microscopical examination of the sputa, and the diazotic reaction of the urine so characteristic of tuberculosis, will always solve the clinical problem.

And now what is the nature of the grippe? Is it simply, as some claim, an inflammatory catarrh, assuming an epidemic character under some unknown meteorological influences? If so, how is it that the disease flourishes under the most dissimilar climatic conditions? Besides, how can a simple catarrhal affection so depress the nervous centres as to cause the profound debility which is eminently characteristic of this disease?

Is it of the nature of the exanthematous fevers? No doubt there is at times an eruptive element about the grippe. In some of the cases that have been reported either in this country or abroad a morbilary, or a scarlatiniform rash has been observed. Besides, there is more than one trait of analogy between the grippe and the fever which precedes and accompanies the eruption of measles, the coryza and the cough being pretty nearly alike in both affections. And again, the thermic curve of the grippe bears a strong resemblance to that of measles. But this is about all that can be said in support of that view.

Is it a modification of the dengue fever? From what I gather of an exhaustive discussion that took place recently in the Paris Academy of Medicine, anent the subject, Dr. Proust, who is a recognized authority in the matter of epidemics, showed that dengue had never passed beyond the limits of 45 N. and 25 S. latitude; and Dr. Brouardel held that dengue and influenza were as specifically distinct as typhoid and typhus.

Is it then a malarial affection? But the microphytus of malaria are restricted to some limitations of space, altitude and latitude which the grippe never knew. Malaria is manifestly endemic, while the grippe is not only epidemic but pandemic. The desultory plea that quinine is claimed to be beneficial in the treatment of the grippe, thereby showing its material nature, has no legs to stand upon, inasmuch as quinine is indiscriminately used in almost every febrile affection whatsoever.

Is it due to an electric perturbation of the atmosphere, to some mysterious cosmic agent? Thus far experiments undertaken in that direction have failed to yield any positive results.

When we take all the facts of the case into consideration we cannot but come to the conclusion that the grippe is a *specific disease, due to some living germ.* Now these germs should be endowed with incredible activity and prodigious multiplying power in order to account for their almost ubiquitous propagation. It is highly probable that the microscophyte penetrates the organism through the ærial passages, and settles in the nasal and bronchial mucous membranes, therefrom finding its way into the blood-current and the nervous system.

That the grippe microphytes have not yet been captured and seen is of course a matter of regret, but no reasonable doubt can be entertained as to their existence. We know it by the same inductive process which enabled Leverrier to see a new planet at the end of his pen, long before he caught sight of it at the end of his telescope.*

As regards the treatment, you already know the general idea of it by what I have said in connection with the few cases just related. The honest truth is that the more homœopathic you make it the more efficient it seems to be. No one remedy could be turned into a specific against the grippe. Individualization is strictly in order in a disease where the "materies morbi" is, so to speak, intangible. Select your remedies according to the phenomenal expression by which the nervous centres shall translate the morbid ictus.

In the present epidemic I have found aconite, gelsemium, belladona and pulsatilla very useful in the catarrhal form; gelsemium, bryonia, rhus tox., cimicifuga in the neu-

* Since then the Vienna bacteriologists claim to have seen the bacillus of influenza, but they have not succeeded in cultivating them.

ro-muscular form, with occasional resort to zincum met., glonoine and spigelia, when indicated by the head symptoms. In the gastro-intestinal forms I found ipecac., colocynth., merc. corros., often indicated and useful. Against the redoubtable pulmonary complications we may rely on phosphorus, ipecac. and tartar emetic, when bronchiolitis is threatened.

In most pneumonic cases phosphorus is our main-stay, but it has to be supported by such agents as will tend to modify the depression of the nerve centres and the paresis of the vagus. In that line you will find lachesis, crotalus, carbo veg. to be invaluable.

Likewise, also, lycopodium and ammonium acet. render splendid service in those forms where symptoms of asphyxia set in abruptly, with rapidly increasing dyspnœa.

In no case did I find it necessary to give any quinine. With regard to antipyrine, all I can say is that the reckless and indiscriminate use of this drug, which is known to bring down the temperature and to allay the pain at the expense of the vitality, is simply injudicious, to put it mildly, especially in a disease characterized by a depression of the nervous energy and a lowered tone of the central motor of the circulation.

Clinical Society Transactions.

H. N. LYON, M. D., SECRETARY.

JANUARY MEETING, 1890.

The regular monthly meeting of the Clinical Society was held in the club-room of the Grand Pacific Hotel, Saturday evening, January 25th, Dr. E. S. Bailey, President, in the chair. Two hundred and fifty physicians and medical students were present.

The report of the Bureau of Gynecology being called for, Dr. Ludlam said that a fortnight ago he had suggested to the officers of the Society that the formal presentation of his paper be dispensed with and that the hour be devoted to a discussion of the proper treatment of "La Grippe." The idea had been accepted and notices had accordingly been issued with the result of a very full attendance of members and of students. He was satisfied that a practical talk and interchange of experience on this subject would be more interesting and profitable than anything that he could write or read to such a congregation upon his own specialty. He therefore moved a resolution, which was carried, that the usual order of business be set aside so that the Society might discuss

THE TREATMENT OF THE PREVAILING INFLUENZA.

Dr. H. P. Skiles: In opening the discussion, Dr. Skiles said: It seems to me that the chief remedy in the present epidemic is veratrum viride. It is characterized by nausea without vomiting, excessive fever and great thirst. Baptisia comes next and is indicated when the typhoidal symptoms are pronounced. Bryonia and belladonna are called for in the cough accompanying this affection. Baptisia and arsenicum are called for in those cases

that have come from the hands of our brethren, by whom they were treated with purgatives. I had such a case yesterday: An old lady was so exhausted from the combined effects of the influenza and of purgatives, that she had been given up to die by three old-school physicians. Arsenicum was indicated and was given, and she is now on the road to recovery. Mercurius is called for where we find diarrhœa. I believe the great mortality of this epidemic to be due to over-medication; quinine and antipyrine being, in my estimation, responsible for over half the deaths.

Dr. T. S. Hoyne: I was very much mortified after the last meeting of the Clinical Society, to read in the daily papers of what had been said and done here at that meeting. Four grains of quinine were recommended as the proper medicine with which to commence the treatment. A number of times, on the day following the last meeting, I was told by patients who had read the reports, that there was no difference between the homœopathic and allopathic treatment of la grippe. I did what I could to counteract such an impression, but without much success.

If there is any one disease that is better controlled by our homœopathic remedies than influenza I have not yet seen it. I am gratified to hear Dr. Skiles say that quinine and antipyrine are responsible for most of the deaths attributed to the epidemic. I don't think a homœopathic physician in this city has lost a single case.

The main remedies have been aconite, gelsemium, bryonia, phosphorus, phosphoric acid, veratrum album and arum triphyllum.

Aconite was indicated at the commencement of the attack, where there was no running from the nose or eyes, with a high fever and great thirst.

Gelsemium was called for when there was no thirst, but a high fever.

Bryonia was useful on the second day, and was specific where there was a hard, dry cough accompanied by great soreness through the chest. Later, when the cough became loose and rapid, hepar sulphur was called for.

Phosphorus was useful where there was cough; diarrhœa, stools loose and watery. Phosphoric acid relieved those cases in which the prostration was extreme. Arsenicum was indicated in some cases where the nasal mucous membrane was affected and discharged a copious, watery secretion.

Where the discharge was acrid, excoriating the nose and lip, arum triphyllum would relieve.

Dr. Ludlam: I would like to ask Dr. Hoyne if he has had any cases of pneumonia?

Dr. Hoyne: No.

Dr. Skiles had had several cases of pneumonia, pleuro-pneumonia and pleurisy following this trouble. One case of pleuro-pneumonia began in the lower lobe of the right lung, and the discharge consisted of both the rust-colored sputa of pneumonia and the heavy sputa of la grippe.

Another case was that of a patient who went to New York while suffering from the influenza. He returned ill with pneumonia. The thick, heavy sputa has been most serious in babies. If I have lost any case it was that of a baby. When I was called in, the pneumonia had already developed. The temperature was at that time 105°. This child had never been strong since birth. I have not lost any others.

Dr. Otto Poppe: I have used no quinine, excepting in one or two cases, and then I was sorry that I had done so. With one exception all my patients have recovered. That one, a baby weakly from birth, died of a bronchitis following an attack of influenza. I have used about the same remedies that Dr. Hoyne mentioned, with the addition of ipecac. and tartar emetic in a few bronchial cases.

The worst symptom that I have encountered has been a hard, irritating cough that does not seem to get better. The irritation is in the trachea, extending from the larynx. I would like to ask Dr. Hoyne, or others, what they have found most successful in this condition?

I suppose that this influenza is a catarrhal trouble, but in over half the cases that I have seen there were no ca-

tarrhal symptoms. Headache, backache and vomiting have been present in all cases. I have also noticed that the diarrhœa is bound to come in a large number of cases. Frequently it would have passed away before I had reached the house. I think Nature has done in some cases what was ascribed to the remedies that were given.

DR. HOYNE: If the cough becomes worse when the patient lies down, hyoscyamus is the remedy.

DR. POPPE: What would you use if the cough was more troublesome during the day, while the patient was sitting up?

DR. HOYNE: Rumex.

DR. LUDLAM reminded Dr. Poppe that in the last number of *l'Art Médical*, Dr. Jousset speaks highly of rumex for this peculiar cough.

DR. FRANCES B. WILKINS: My experience has been in accord with that of Dr. Hoyne. I have used listerine locally in some cases, either diluted or in full strength. I have had no deaths, and only one case of pneumonia, and that was in a lady over 60 years of age. It was accompanied by the usual rust-colored sputa. Diarrhœa has been a prominent symptom in a large number of cases. Hydrastin has helped greatly in some cases. I have used it at the close of the trouble as sulphur is frequently used.

DR. H. P. HOLMES read a brief paper advocating the claims of magnesia phos. as the homœopathic remedy for this disease, a parallel being drawn between the pathogenetic symptoms of that drug and the peculiar subjective symptoms of the attack.

DR. W. S. GEE: The subject continues to be of great interest, and the epidemic is still upon us.

At our meeting one month ago I stated that by making a study of the symptoms collectively which had appeared in a number of patients, gelsemium proved to be the remedy. In the great majority of patients suffering from the epidemic it is still the remedy, and in some instances a change of potency is all that is required. In others for symptoms appearing later, other remedies are needed. Among them

for the cough, rumex, hyosciamus, beliadonna or chelidonium, but none so frequently and with such satisfactory effect as phosphorus. The dry, rasping, scraping sensation, aggravated on lying down—especially on the left side—from talking, fatigue, emotional causes, all indicate phosphorus. Patients must understand that the cough will remain for a time, as does the fever in the continued types, until convalescence is well established. The pneumonia has not seemed real but more of the catarrhal, broncho-pneumonia, or a real engorgement of the lungs. Single lobes, or even parts of lobes, with a persistent, obstinate, creeping advancement, has been noticed, and as with all the other manifestations of the disease, a tardy recovery.

The abdominal muscles are often extremely tender to the touch, and give pain when assuming the erect posture. Intense backache, causing restlessness and disturbed sleep, the pain in some instances extending down the legs; the urine is reddish, with much sediment after standing. Lycopodium has been of value, also nux vomica, rhus tox. and bryonia. Gels., ars., cocc. and nux vomica, or better still, strychnia sulph., meet these symptoms.

I have observed that a larger number of men than of women are seized by the disease. Great caution is necessary on resuming business, as relapses are apt to follow cold or fatigue, and cause a serious result.

Dr. J. Watry: Being a specialist I have not been fortunate enough to have had a single case of the influenza, as it is out of my line. I came here to-night hoping that some cases of middle ear inflammation might be turned over to me. I would like to ask the members what has been their experience with this as one of the sequelæ?

Dr. Skiles: I have heard of cases of suppurative inflammation of the middle ear following an attack of la grippe. Both ears were affected in them all.

Dr. Gee had had only one case, and in that one the right ear only, was affected.

Dr. J. P. Cobb: I have seen several cases of the epidemic disease, and have been especially bothered by the

cough. Bryonia has helped some, and phosphorus others. Rumex has relieved a hard, dry, rasping cough, which was not worse at night but when the patient was sitting up. I was especially interested in the cases of pneumonia mentioned by Dr. Gee, and believe them to be more of a catarrhal condition than a true pneumonia. In some of my cases of pneumonia the rust-colored sputa has been accompanied by a discharge of blood, or the blood has appeared alone. These cases were relieved by phosphorus or tartar emetic. A severe headache calling attention to gelsemium bothered me some, but when that remedy failed to relieve, I found cannabis indica helpful.

I had two cases of middle ear inflammation; one during an attack of influenza; the other so long after that I am uncertain whether the epidemic was responsible for it or not.

DR. G. B. BUSHEE: My experience has been that the treatment of the present epidemic of influenza does not differ from that of a common cold; and it is a question with me if many of these cases are anything more than a common cold. I have used arsenicum, belladonna, bryonia, nux vomica and the other remedies commonly used in the treatment of colds, and with good results. My cases have shown more of a general prostration than catarrhal symptoms. It may be behind the times, but I believe an "old-fashioned sweat" has aided me in many instances. New Year's Day I came down with an attack myself, and experienced the headache, pains, fever, etc. I used hot lemonade freely, and took a hot mustard foot-bath. The next morning I was free from any symptom.

DR. W. J. HAWKES: I have just come from a family where there are four generations ill with la grippe in the same house.

A universal condition of the present epidemic is the great prostration. As in diphtheria, the prostration is greater than the severity of the attack and the duration of the illness would call for. Another peculiarity is the tendency to extend to the brain. Even in light attacks, there may be delirium, or, perhaps, insanity. In the pneumonia

following, all are delirious, and in the fatal cases the patients have died while delirious or comatose. I have seen four cases of pneumonia in consultation with other physicians, and in each instance the patient was delirious for at least twenty four hours previous to death. Although the patients were unconscious when I saw them, they gave evidence of severe brain irritation.

The choice of treatment of this epidemic of influenza is the same as in any other disease. Any remedy in the materia medica may be called for; perhaps a dozen different ones in the course of the day, I have had no trouble except in such cases as had begun by treating themselves with antipyrine, quinine, etc.

I have had only one case of pneumonia in my own practice and that was more properly a case of pleuro-pneumonia. It occurred in an old lady who was already worn out from nursing, This case recovered. I have had no deaths. As to the remedies, I have found aconite and arsenicum frequently indicated ; ammonium carb. has been especially useful ; belladonna and bryonia have acted well and have been often called for. In other cases I had good results from arnica and rhus toxicodendron.

Dr. Sarah W. Andrews : My experience has been about the same as that of those who have preceded me. Aconite, bryonia, rhus tox., arum, ipecac. and gelsemium have been the main remedies. Drosera has relieved a dry tickling cough in a number of instances. I have also insisted on the patient staying in bed for forty-eight hours. I have had two cases of pneumonia and both recovered.

Dr. W. P. MacCracken had had about the usual run of cases and the remedies used have been similar to those mentioned. One other remedy has done good service in my hands : this is eupatorium, which is called for where there is great chiliness on moving and a terrible aching all over the body. When I have given this remedy alone the patients have escaped the prostration. Phosphorus has done good service for the cough ; where that failed belladonna has relieved. Rumex and sanguinaria have also been called for.

I have had three cases of pneumonia, but have had no losses.

Dr. W. M. W. Davison: I do not distinguish in practice between this trouble and the Texas dengue. It is assumed by southern physicians that dengue has for its origin malaria, and it is certain that it exists in malarial districts. In this epidemic I cannot say that there is any malaria back of it, yet we find the malarial remedies to be the ones called for. In dengue there is more stiffness of the knee and ankle joints as a rule, than in the influenza. On account of the stiffness of the joints in walking, the darkeys call it "dandy fever."

I have not seen a single case of the influenza in which quinine had been used that was not made worse by it It has not always been an easy matter to select a suitable remedy on account of the ignorance of some of the patients. Aconite, bryonia, belladonna, eupatorium, phosphorous, arsenicum have been mostly required. Eupatorium has given good results in those cases in which gelsemium had been given without affording relief. Gelsemium has frequently been indicated, especially where there was an excessive headache in the back of the head. As to the potencies used they ranged from the third to the highest.

Dr. Hoyne: One other remedy that has not yet been mentioned I found indicated in a single instance. The most annoying symptom the patient, a child, complained of was a loose, rattling cough, and chelidonium relieved it. In this remedy we have almost a specific for the loose, rattling coughs of children.

Dr. Hawkes: Gelsemium is much more frequently called for at present than in the beginning of the epidemic.

Dr. W. A. Dunn said: In regard to the pathological condition, it is my belief that the whole trouble has its origin in a form of poison of the vaso-motor centres, causing thereby a paralysis of the vaso-dilators, from which arise sudden and violent congestion of more or less of the body.

The effects are especially exerted on those tissues that are freely supplied with blood vessels, *i. e.*, the brain, mucous mem-

branes, lungs, etc. The inflammation as a rule, in uncomplicated cases, or in a subject with not already weakened organs, is transitory, and is but a rapid congestion of those organs showing the least resistance to the vascular paresis. All the symptoms and the course of the disease are easily appreciated on this hypothesis.

As to the short, hacking cough of which so much has been said, I find it due to an inflammation with thickening of the epithelium of the mucous membrane of the inter-arytenoidian space. The thickened epithelium is seen to lay on the surface like a thin piece of tissue-paper, and instead of the surface of this space contracting smoothly as it should, it is seen to fold together in irregular ridges.

I have observed this condition resulting from whooping-cough, measles, scarlatina, and in fact, any form of inflammation about the throat.

I remember this cough used to give me more trouble than any other condition with which I came in contact, but since I have recognized its cause I have been able to quickly relieve it. Rumex crisp. is the best remedy; but if it is not soon relieved I make a direct application to the spot of a solution of zinci chlor., one grain to the ounce.

Dr. J. H. S. Johnson: Among the various remedies that I have found useful, are aconite, bryonia, arsenicum, kali phos. and kali mur.

Kali phos. 6 x works well where the prostration is extreme. It acts as a stimulant, especially when delirium is also present.

Ferrum phos. has relieved the severe lancinating pains which apparently called for bryonia, but which were not affected by that remedy.

Kali muriaticum 6 x relieved a sore throat for which belladonna had been given ineffectually.

I have used magnesia phos. in a number of cases. With some it worked well, but with others it failed.

I have as yet lost no cases, but have had a number of cases of pneumonia. Most of these were in the form of

pleuro-pneumonia. I have had several cases of spurious peritonitis that were relieved by magnesia phos.

Dr. N. C. Kemp: Gelsemium 2 x trit., in my hands, has been sufficient in most instances to remove the headache and aching pains. It has acted more promptly than any other remedy. In a few cases cimicifuga worked well. I have had pneumonia only in those well advanced in years. I have treated a number of cases of this complication in the Old Peoples' Home, and every one seemed bound to drift into pneumonic symptoms. In no case of pneumonia has the patient been under sixty. The pneumonia has been controlled by the usual remedies. Arsenic has met the asthma better than any other remedy.

Dr. R. Ludlam, on being called for, congratulated the members on having so earnestly and so calmly considered the question before them. Surely nothing could be of greater interest or importance just now than rightly to consider how best to treat the victims of this serious and wide-spread epidemic. He had little to say, except to call attention to the fact that severe epidemics of all kinds carry off the most susceptible subjects first, and then the people begin to talk about their force having abated, and the physicians begin to claim that they have them under control. The fact is, that the greater the degree of vital resistance on the part of our patients, other things equal, the better the results of our treatment in all these affections.

Another point was, that epidemics became modified in their type when they are not very transient in their duration. A month ago this *grippe* was catarrhal, and affected the respiratory mucous membrane almost exclusively; now, in the majority of cases, its seat is in the gastro-intestinal tract, and may or may not be of a catarrhal nature. We can not say what it will be next week, or next month, if it lasts so long. In some of these cases the relapse is characterized by a sharp and sudden attack of painless vomiting and purging, with a total suppression of the bile, that continues for three or four days. The faeces and the matters vomited are absolutely colorless. The egesta are flat

and insipid, and there is often fainting and collapse, with a soft, weak pulse of from 40 to 50.

He thought that the discussion did not cover the whole case when it failed to consider and to prescribe for the extreme prostration which accompanies even the mildest attacks of this disease, a condition which always exists in epidemics that are either general or fatal. For the relief of this prostration, especially in the case of those who did not take it from habit, Reich's brand of Tokay or a little whisky were sometimes of the greatest service. Coupled with this was the evident indication of keeping the patient in doors, and in bed. The horizontal posture was better than anything else for the relief of the peculiar cardiac strain, which should not be disregarded, and which through being overlooked, or defied, had greatly increased the number of sudden deaths from "heart-failure" in this city since the invasion of the epidemic.

Dr. L. concluded by quoting Jousset's editorial remarks upon this affection as it has recently prevailed in Paris.*

"The epidemic of 1889 presented the symptoms common to all these epidemics, a brusque onset, great prostration, nausea, intense headache, and aching all over. But it had some special symptoms by which we could recognize three distinct forms:

"1 The *catarrhal* form, characterized by a laryngo-tracheitis, that may extend to the bronchial tubes, to the pulmonary tissue, and even to the pleura; so that a bronchopneumonia, or a pleurisy, may render this form dangerous.

"2. A *rheumatoid* form, with excessive and violent muscular pains, that oblige the patient continually to change his place. This variety is not dangerous to life.

"3. A *febrile* form, of which an excessive fever, reaching to 104.° constitutes the chief characteristic. The headache is very bad, the eyes are congested and sensitive to the light, and there is always some aching. It often begins with vomiting, and may be accompanied by colic and diarrhœa. * * * * *

"I have sometimes, although rarely, observed an erythematous eruption on the face and the extremities. Such

**La Grippe a Paris.* L'Art Medical, Janvier, 1890.

eruptions were noted in similar epidemics at the beginning of the century.

"The occurrence of *la grippe* without any symptom of catarrh has troubled quite a number of physicians who were in the habit of considering it as essentially catarrhal, and always bronchitic. Even the term itself is founded on a prejudice. The history of other epidemics of this disease has furnished examples of *la grippe* that were not catarrhal."

DR. POPPE: I am glad Dr. Ludlam has spoken about the cardiac symptoms. I have had several cases of the same kind. One patient, a gentleman, had high fever, vomiting and severe pains for two days which were followed by profuse watery stools, which so far prostrated him that the heart almost refused to beat. It was very irregular. For a few moments the pulsations would be normal, and then for a time cease entirely. Veratrum was given with very happy results, the heart's action being nearly normal on the following day.

In several cases of la grippe in women, coming at the time of the menstrual flow, the monthly sickness was prolonged. In others, in which it anticipated the menses, the flow failed to appear. The patients complained of severe bearing-down pains, sharp pains in the abdomen, and the abdomen was tender. This was followed by a discharge of mucus, a muco-sanguineous, or a muco-purulent secretion.

One patient, who was suffering from a chronic endometritis, had an acute attack brought on by the epidemic.

DR. GEE: It is said that the so-called "Christian Scientists" are not affected by the grippe. Perhaps the explanation of this is that this trouble rarely affects women.

DR. E. S. BAILEY: In reply to Dr. Gee's statement about "Christian Scientists" I would say that I have had occasion to treat four of them for this trouble, and that they took their medicine like good fellows.

DR. DAVISON: I have also had one of them.

DR. H. N. LYON: As to the pathology of this disease, there is little that is definitely known. Several germs have been discovered, but they differ from one another as

greatly as do the various methods of treatment. A germ origin, or germ influence, has not yet been proven. I am inclined to place it among the nervous diseases, with its chief seat of action in the vaso-motor centres. Certain it is that the nervous system is powerfully affected, and to a greater degree than the vegetative. I have made a number of analyses of the urine of patients suffering from la grippe. In every instance the amount of phosphates excreted was nearly double the normal amount.

I have had a good many cases of this trouble, and in almost every instance prompt relief has been afforded by the administration of gelsemium 200. In one case, seen during the initial chill, camphora relieved, the attack lasting only about eight hours.

At the last meeting I spoke of lycopodium as presenting a pathogenesis resembling this disease. I have not found it indicated during the attack, but have given it with excellent results after gelsemium had ceased to act, when only the alimentary symptoms remained.

The only serious case seen was that of a young child with hydrocephaloid, in whom a meningitis supervened. This was controlled by mercurius, and later by helleborus. What the record would have been if the average age of my patients was greater, I do not know.

SUPPLEMENTARY REPORT FROM OUTSIDE SOURCES CONCERNING THE PREVAILING EPIDEMIC.—The following remarks on *la grippe* were made at a meeting of the Homœopathic Medical Society of Kings Co., N. Y., January 21, 1890.

DR. E. HASBROUCK: It has seemed to me, that possibly that portion of the city (south-eastern Brooklyn, known as Prospect Heights) in which the greater part of my practice lies, was about the first to receive a visitation of the epidemic so recently prevalent and familiarly known as the grippe, for I had for several days been treating cases which were recognized as similar in symptoms to those reported as prevalent in Russia, before I saw anything in the papers

regarding the presence of the disease in other parts of the city. The first case which I recognized as grippe was seen on the evening of Dec. 20, 1889, but my business did not show any decided increase until the 23d inst. From that date until the 31st it daily augmented until it reached proportions two-thirds larger than my average daily work. From the beginning of this month until to-day it has fluctuatingly decreased back to the ordinary. I mention my own work to show how prevalent the disease was in one portion of the city, as my professional neighbors who have become fully established, seemed to be equally busy with myself. Personally, I had no symptoms which could be regarded as belonging to the epidemic. The number of cases treated cannot be exactly stated, as many came to the office, and it was not uncommon to prescribe for from one to six persons during a visit at a residence.

The larger proportion of the cases seen began with chilly sensations rather than by a pronounced shaking chill. Severe aching pains in the back and limbs, with unusually hard headache, from the forehead, band-like, to the occiput, were the accompaniments of the febrile stage, which stage would last from one to three days with the cases in which the bronchii were not involved. I do not recall a temperature over 104°, the larger number being from 101 to 103°. Very few of the stricken ones presented evidences of any of the forms of tonsilitis. A majority had coughs more or less severe, and some developed quite intractable bronchitis. Those who coughed, did so almost incessantly, and particularly upon movement, the cough being entirely out of proportion to the amount of expectoration: in fact, absence of expectoration was the rule. The coughs were usually accompanied by pains, largely located low down in the sides of the chest and around the body at a point, as expressed by the ladies, "just below the waist line" and under one or both scapulæ. A small proportion had inflammation of the frontal sinus, with its consequent severe neuralgic pains around and through one or both the eyes. No case had marked coryza. A few presented moderate

nasal discharge. No diarrhœa was met with. An undue prostration, compared with the seeming severity and duration of the cases, was noticeable. It seemed as if all sick persons were subjected to greater degrees of prostration than usual, and that the prostration might be justly attributed to the causes contributing to produce the epidemic. Few children were attacked, the majority within my observation being exempt. There was no very appreciable difference as to the sex attacked, yet, perhaps, the exemption favored the women.

No epidemic remedy was discovered. If a case was seen during the stage of invasion, aconite or gelsemium was usually prescribed. Bryonia seemed to benefit many of the headaches, as well as the general muscular pains. It was also the main remedy chosen for the coughs, although some required sanguinaria, or phosphorus. In a few instances, for catarrhal symptoms of the head and nose, sticta pulm. was used. Some cases, showing gastric and hepatic complications, received mercurius, or nux vomica, or chelidonium, as indicated. Pulsatilla seemed more appropriate when children were attacked. For the severe pains attendant upon the inflammation of the frontal sinus, reliance was placed in, and benefit received from, a systematic use of hot water, the medium of application being sponges or cloths. Four cases of pneumonia were treated during the epidemic, but none of them could be distinctly traced to influenza. No deaths occurred with me until January 16th, when a young married lady who had had a previous valvular lesion, died from cardiac failure during a comparatively slight attack of the prevalent bronchitis.

It seems quite probable that many of the cases of pneumonia, of which we have heard during the epidemic, were due to careless exposure during an attack of influenza, or a resumption of occupation after an attack, before the system had regained its usual vigor. A considerable number of deaths from pneumonia have occurred in my neighborhood, and by way of comment on the treatment of that disease, it can be stated that a recent examination of the rec-

ord book of one of the leading undertakers showed that he had buried, since January 1st, sixteen persons whose deaths were certified to have been due to pneumonia, and that of that number fourteen had died under treatment of physicians whose methods are not homœopathic; and for the credit of our local practitioners it may be said that the two who died under homœopathic management were patients of physicians residing in other parts of the city.

Dr. W. S. Searle said: I saw my first case of this disease early in October, although I did not then recognize its true nature. The subsequent symptoms have, however, fully identified it. In my experience, children, as a rule, have been exempt. To the best of my judgment, I have had one case in a child of nine months, and another of five years of age.

I have lost two cases—one a maiden lady of sixty, whom I did not see till she was beyond hope; the other a man of middle age, who, though never drunk, was rarely sober. Both had pneumonic complication, but of a mild catarrhal form, and both evidently were killed by the *grippe*, as they had a continuous temperature of 105°, and entire sleeplessness. No homœopathic remedy availed to reduce the fever, and phenacetine was finally resorted to. Although this remedy depressed the temperature, I am now inclined to think that the patients might have lived longer, at least, without it. For they were already struggling with one virulent poison, and why should they have been called upon to fight another?

In my experience, those who took quinine as a preventive and got the disease, fared worse than those who did not take it. It is in a degree homœopathic to the disease, and large doses, of course, aggravated.

In those instances in which the poison of the disease appeared to spend its force upon the cerebro-spinal system, the symptoms reminded one very much of the early stages of cerebro-spinal meningitis, and in the great recurring prostration which followed these cases in convalescence, I have seen the most brilliant tonic and restorative effects

from the daily use of static electricity in the hands of experts. Aconite, gelsemium, bryonia and cimicifuga, with sanguinaria for the catharrhal symptoms, have proven most efficient in my hands. A very hot bath in the outset is also very efficient.

Dr. W. W. Blackman: The profound prostration, showing the effect upon the nervous system, inclines me to believe that it may be a nervous disease or one irritating the cerebro-spinal centres, with some varying catarrhal manifestations. In several cases obstinate neuralgias have followed attacks of influenza. The peculiarity of the prostration was its persistence and tendency to relapse. I have as yet lost no cases, but now have a serious one with heart failure which is liable to collapse at any time.

Dr. R. R. Martino brought to the notice of the society portions of the account from Parr's Medical Dictionary (edition of 1803), taken mainly from Sydenham's works, of the epidemic of 1675. Of the peculiar conditions of the atmosphere which preceded and existed at the time, viz. "The season being unusually warm and the atmosphere super-saturated with moisture; that in the preceding summers of 1673 and 1674, there were cases of cholera-morbus, and in the falls of the same years bilious fevers of a low adynamic form, accompanied by sopor, ending if improperly treated in coma; that in the fall of 1675 the cough broke out, added to the previous epidemic fevers." Sydenham's own words are: "For it began now, as it always did with a pain in the head, back and some of the limbs; which were the symptoms of every fever of this constitution, excepting only the febrile matter, when it was copiously deposited in the lungs and pleuræ, through the violence of the cough, occasioned such symptoms as belong to those parts—that the fever was the same that had previously prevailed, and yielded to the same remedies."

Dr. J. C. Smith's account of the epidemic in 1782, is in many respects the most complete as regards its symptomatology: the headache, the pains in the body, the languor, the prostration, and the oppression at the præcordia, the

nightly delirium, the exacerbations of the fever, are all a faithful picture of this present epidemic. He calls attention to the fact that "Women with child, when seized with the disease were apt to miscarry; or if far advanced in their pregnancy to be delivered before their time. In either case the *hæmorrhage* was considerable, and several died."

Dr. Martino stated that during the fall of 1888 and 1889, he had some cases of bilious, remittent fever, and in the summers of the same years cases of diarrhœa bearing a strong resemblance to those mentioned by Sydenham and his contemporaries; also that during the present epidemic he had found a number of cases of profuse uterine hæmorrhage, both in married women and young girls; that one mother stated to him that her daughter, æt. 17, one morning at 4 o'clock had as profuse an hæmorrhage as in an ordinary confinement, and that she fainted from it.

In November, 1888, a lady patient came to him with all the symptoms of the present "grippe" though not so severe, for which he gave her lycopodium. In a week or so after the mother and husband were taken with the same cough, they insisting that they had taken it from the first patient. He had also had two cases in young children which began with convulsions.

His remedy throughout had been lycopodium in the 30th or 200th, mainly the latter, except in a few cases, giving an intercurrent dose of some constitutional remedy, such at sulphur 200, or the lime salts. In all cases the results had been uniformly good. He thought lycopodium the one epidemic remedy, and that in the neuralgias following an attack of the disease he found it equally satisfactory.

REPORT OF THE BUREAU OF GYNECOLOGY.

A plea for the innocent ovary.—By R. Ludlam, M. D.—In the practice of abdominal surgery the most difficult thing is not the manual, but what might be called the mental portion of the work, *id est* the settlement of questions that are opened up by the operation itself. Among

these questions none is perhaps more serious and important than to determine whether, after having removed one ovary and its corresponding tube, we should also take away its fellow before closing the abdomen. When the Battey-Tait operation was coming into vogue the practice was to limit it to the removal of one ovary. The exception to this rule was when both of them were evidently involved in a common disease, or when the ovaries were taken for the relief of an intractable menorrhagia, with or without fibroids.

At present, however, most of those who practice the removal of these appendages prefer to take them both away in every case, the theory being that if one of them has been diseased and is removed, the other is almost certain to become so if it is allowed to remain within the pelvis. It is claimed that the sympathy between the two ovaries is as intimate as that which exists between the two eyes; but surely the oculist who finds it necessary to extirpate the diseased eyeball would not argue that the opposite globe should also be removed lest it might become involved if left behind. Indeed his practice is to take away the diseased organ as soon as possible, in order to save the other one.

My own experience has led me to conclude that in tubo-ovariotomy the rule must vary in different cases, and that the most careful judgment is requisite to settle this question properly and to the best interests of all concerned. That there are cases in which it would be wrong to make the double operation there can, I think, be no doubt; and conversely it is none the less true that the clinical and anatomical conditions may, and usually do require that both ovaries shall be removed at the same time.

If the trouble is due to a displaced, or a strangulated ovary, with or without serious adhesions, it is not always necessary to take them both away, whether by the abdominal or the vaginal method. The same is true if the lesion that calls for extirpation can be traced to the direct traumatism of either ovary, as from a kick, or a blow in the inguinal region. Most cases of ovarian epilepsy can be traced to an

accident of this kind, and are as justly entitled to the appellation "traumatic" as are those cases of cerebral epilepsy following an injury which in these latter days are cured by trephining. And while a few of these cases of strictly menstrual epilepsy are cured by limitation when both ovaries have been removed, it is a serious question whether the operation has not failed in many others because the sound ovary has been unnecessarily sacrificed and the catamenial function inadvertently suppressed.

Before making an ovario-salpingotomy for the cure of this form of epilepsy, my habit is to make the most dilligent inquiry concerning the date and cause of the first attack, the location of the injury, the time of the month at which it occurred, the modification of the menstrual experience since that time, whether the paroxysms always recur at the period and how they are affected by the flow. Then, when the diseased tube and ovary have been cut away, if the other ovary is apparently sound, and the tube is not distended or abnormal in any way, more especially if the patient is a young married or marriageable woman, and if there are no signs of an old and recurrent pelvic peritonitis, they are left in situ, and usually with a good result.

Case 1. Some years ago a girl of 22 was sent to my department of the hospital from Michigan for treatment for an inveterate hystero-epilepsy to which she had been subject since having had a serious fall soon after the menses were first established. The epileptiform symptoms were so pronounced, and the fits had become so frequent, that, before doing anything in an operative way, my colleague Prof. Fellows was asked to see the case with me. He decided that until the damaged ovary was removed, it would be of no use to treat her medically for the relief of the nervous symptoms, and advised its extirpation. The left ovary and tube were accordingly taken away, and the right one was left. She made a good recovery from the operation and returned home. The fits recurred, but with a gradually decreasing severity. The menses were normal, however, and the remedies which Dr. F. continued to send her for a few months finally disposed of the paroxysms altogether. In a little while her marriage engagement, which

had been broken off because of her ill health, was renewed, and now she is the happy mother of a healthy child.

Case 2. Miss T., æt. 30, single, began to menstruate at 14. She grew rapidly, was very active, but was well, excepting that she had an attack of circumscribed peritonitis which resulted from taking cold, and which was followed by effusion. This trouble soon yielded to apis and other appropriate remedies, and her health was completely restored. Menstruation was regular and almost painless. At 17, while descending the steps of the High School building, she slipped and fell in such a way as to cause the most intense pain and suffering in the right iliac region. This accident sent her to bed, and she was very ill, her pains merging into a terrible attack of dysmenorrhœa, with spasms and general convulsions.

At the time of her admission to the hospital as my private patient her mother said that, in the fourteen years that had elapsed since the fall, she had never failed to have these convulsions with the recurrence of the menses; nor, excepting in a very few instances, when they were induced by over-fatigue or excitement, had she ever had any spasmodic symptoms at any other time. These menstrual fits were epileptiform, were always accompanied by foaming at the mouth, unconsciousness, and prolonged sleep at the close of the attack. They usually came at night, or in the early morning, and of late were much more severe and protracted. Although she had forgotten the fall, and had never regarded it as the exciting cause of her troubles, all the pain and suffering at the month was referred to the seat of the injury.

A careful laparotomy exposed the offending ovary and tube, both of which were badly damaged, and both of which were excised. The corresponding organs were, however, healthy, and were allowed to remain. There was nothing wrong with the peritoneum. She got well promptly, and, for the first time since the mishap, soon menstruated as she had done originally, without pain or any nervous accident or incident, save that an hour or two before the flow began her temperature suddenly mounted to 105°.

It is a great pleasure to have restored this young woman to health, and not, through an excess of operative zeal, to have entailed upon her a life of generative incapacity, for now she is happy in anticipation of her approach-

ing marriage. Two months have elapsed, and she has had no recurrence of the convulsions, and only one slight whirl, with a few nervous symptoms that were threatening. Her family have been told that they cannot reasonably expect her to be exempt from these visitations unless she is subjected to a strict quarantine at the month, and to the influences of a quiet home life, with proper medication between times, and that even then the old habit may recur occasionally.

These and other cases of a similar kind have convinced me that the current opinion which holds that hystero-epilepsy is not amenable to surgical treatment and is never benefited by the Battey Tait operation, is wrong and misleading. When it is really a genital neurosis, and especially if it is of traumatic origin, with menstrual exacerbations that are distinct and consequent, I think we may reasonably promise a good measure of relief, and perhaps a radical cure in most cases. Something, of course, depends upon the duration of the disease, heredity, and a host of possible complications, and very much also upon our ability to keep the menstrual life and the generative function intact *by leaving the last and the innocent ovary where it belongs.* In some of these cases, too, the very best effects may be derived from the use of appropriate remedies *after the thorn in the flesh has been removed.*

There is another class of one-sided ovarian disease in which the double operation is neither necessary nor advisable. In chaste young women who are unmarried, exemption from the consequences of sexual wear and worry, of specific tubal disease and of the post-puerperal possibilities, relieves them in a great measure from the liability to a simultaneous involvement of the uterine appendages, or to an extension of the disease from one ovary to the other. Surely this fact deserves to be remembered when we come to the extirpation of the diseased parts, and it ought to protect these patients from being needlessly maimed.

There is plenty of evidence to show that the sexual instinct and capacity may survive the removal of both the

ovaries, and that it may even be more natural without them, if they were diseased; but no one has claimed that the generative function is not abolished when a woman is robbed of her last remaining, healthy ovary. We should consider these clinico-moral questions more carefully and conscientiously, or somebody will start a society for the protection of these innocent little organs, as they are related not only to the preservation of the species, but to the happiness of mankind.

Case 3. Hypertrophic cirrhosis of the left ovary; tubo-ovariotomy, with a prompt and perfect recovery. Miss ——, twenty-five years of age, had been an invalid and almost constantly under treatment for five years. Her illness dated from what was said to be metritis, and the first attack kept her in bed for eleven weeks. In the beginning she menstruated copiously, but with an intermittent discharge. For two years past the monthly suffering has very much increased, at which time and especially during the flow, she always has a severe pain in the left ovarian region. This persistent pain is always of a burning character and is often accompanied by throbbing. The nervous system is badly broken up, the appetite is very capricious, the bowels are obstinately constipated, she is very anæmic and the feet are sometimes puffy and swollen. For three months past the menses have not appeared. Her enfeebled health has excited the sympathy of her family and friends.

This was the patient's condition when she was placed in the care of our clever friend, Dr. O. W. Carlson, of Milwaukee, who at once detected an enlargement of the left ovary, and sent her to me to see if that organ had not better be removed. The result was that we made the operation in St. Mary's Hospital, Milwaukee, with the assistance of Dr. Carlson and Dr. Belle Reynolds, July 20, 1889. The left ovary was of irregular form, cirrhotic, as large as a goose-egg and slightly adherent, while the outer extremity of the tube was also thickened and enlarged. The right ovary and oviduct were free and normal in every respect. There were no signs of peritonitis, uterine hyperplasia or of any other abnormality within the pelvis. The sound ovary was left and the wound was closed with the usual precau-

tions and in the usual way. She had the best of nursing and care and made a prompt and perfect recovery. All of her old symptoms have now disappeared and she is absolutely well again.

That the future of this operation is full of promise for suitable cases there can be little doubt. It has been abused because it has been misapplied, because too much has been claimed for it as a curative resource, and because under the lead of certain distinguished operators, it has been thought necessary always to take both the ovaries, instead of practicing the more conservative method of leaving one in exceptional cases. It is because the cases in which it is possible to save one ovary are comparatively rare that this question merits our careful study. If there is only one case in fifty in which an ovary that is healthy in all its relations can be saved, we ought to give the patient the benefit of a sensible and skillful discrimination in its favor. And even if now and then we leave one behind that should have come out, it will be easier to repeat the operation and under proper conditions to remove it, than it would be to replace it.

There are those whose ultra-conservatism leads them to disprove of the extirpation of the uterine appendages in all cases in which no organic change of structure can be found and demonstrated; but this is not a safe and satisfactory guide, for the clinical history of ovulation is sometimes more pressing and important than any anatomical considerations whatever.

The study of cases in which it is imperatively required to take both the ovaries and their corresponding tubes at the same operation, which indeed is the rule and not the exception, must be referred to another meeting of this Society.

VOLUNTEER PAPERS—AN ANOMALY IN THE ANATOMY OF THE NERVES, ETC.—BY H. N. LYON, M. D. The accompanying illustration of the brachial plexus and nerves of the upper extremity was made from a dissection; the work of Mr. R. L. Snow, a member of the present junior class in the Hahnemann Medical College of Chicago.

While there is no regular order for the origin of the nerve trunks of the arm and shoulder, yet in the present instance the departure from the prevailing type is sufficient to warrant more than a passing notice. In this specimen the posterior cord is formed by a union of the fifth and sixth nerves, together with a communicating branch from the seventh and eighth. The outer cord is formed of the seventh nerve and a branch from the eighth. The median nerve has two communicating branches. The nerve of Wrisberg is entirely absent.

For the benefit of those who may desire to preserve specimens of this nature, a brief synopsis of the method I have used most successfully may be of interest.

After the dissection is completed the specimen is placed in water to free it from blood and other foreign matter and bits of adhering tissue are removed with forceps or scissors. The water is then poured off and the specimen covered with a saturated solution of the arseniate of soda. In this the specimen should remain at least half an hour. If it is too large to be conveniently soaked in the arsenical solution it may be painted with it, several coats being applied at short intervals. The arsenic acts both as a preservative of the tissue and as a protection against the ravages of insects.

The specimen is now taken from the arsenical bath and pinned on a sheet of oiled paper placed on a board. As soon as it is thoroughly dry it is mounted on a permanent support. Oiled paper must be used as the support during the drying, as otherwise the specimen would adhere to it. During the dissection the parts must be kept moist by wrapping them in cloths wet in equal parts of cheap commercial glycerine and water. In this way the hollow viscera and such tissues as are not too much distorted may be preserved by drying.

If a hollow viscus is to be prepared, the preliminary steps are the same as already given. During the drying process the organ is suspended by bands of oiled paper, and is distended by being filled with air. A cork is fastened in each opening, and a glass tube through one of them, provided with a short length of rubber tube, and a pinch-cock affords the means of filling the organ. If the ordinary illuminating gas is accessible, the specimen may be attached to a gas bracket. This affords a constant pressure, and the specimens do not require as much attention as when they are filled with air from the lungs or a bellows.

1 4th communicating. 2. 5th cervical. 3. 6th do. 4. 7th do. 5. 8th do. 6. 1st dorsal. 7. Supra-scapular. 8. Rhomboid. 9. Superior sub-scapular. 10. Musculo-cutaneous. 11. Branch to do. 12. Deltoid branch of the circumflex. 13. Posterior thoracic. 14. Subclavian. 15. Internal anterior thoracic. 16. Branch to integument. 17. Middle sub-scapular. 18. Interior do. 19. Interior cutaneous. 20. Branch from circumflex to teres minor. 21. Ulnar. 22. Musculo-spiral. 23. Tegumental branch from musculo-cutaneous. 24. Muscular branch of ulnar. 25. Digital do. 26, 27, 28 and 29. Muscular and digital branches of the median. 30. Thenar branch of ulnar. 31 and 32. Digital branch of ulnar. 33. Radial. 34. Median. 35. Posterior interosseous 36. Anterior do. 37. Communicating branch of the phrenic. 38. Median branch of inner cord. 39 Median branch of outer cord. 40 and 41. Branches from 7th and 8th nerves to posterior cord. 42. Posterior cord. 43. Outer do. 44. Inner do. 45. Communicating branch of the 7th nerve. 46. External anterior thoracic.

How to prevent the sequelæ of scarlatina.—By O. W. Carlson, M. D., of Milwaukee, Wis.—More than fifteen years ago I had the misfortune to lose three little children, all girls, in a poor family, from malignant scarlatina. The fourth one, which I refused to attend, soon died in the care of another physician. They all died of the dropsical sequelæ of the disease. My cases were treated in the old way with belladonna, apis, hepar sulph., arsenicum, and the usual homœopathic remedies. The family lived in a low portion of the city, a bad locality, and were not well nourished and provided for.

This sad experience led me to look for a better method of treating this treacherous disease not only in its acute stage, but with a view to avoid its more serious sequelæ, which, as everybody knows, are always more to be dreaded than the original disease itself. As a result of my subsequent experience, I am satisfied that it is what we do in the first four days of its course that is to decide whether there shall be any sequelæ or not. And for this reason I submit the results of my later experience with the wet-pack.

The first hint that I had of treating scarlatina with water was derived from old Dr. J. S. Douglas, late of this city, who, in a medical meeting, stated in my hearing that he had saved many cases by giving them hot baths, and by wrapping portions of the body and extremities in hot wet cloths. From this hint I formulated a system which I

have now followed for several years, and which, in all of my cases, has completely aborted the sequelæ that are so much to be dreaded.

My plan, which is very simple and always available, is, as soon as I determine that the case is one of scarlet fever, to prepare the bed with a rubber sheet, and to cover it with a pair of woolen blankets. Then I double a sheet lengthwise, strip the patient, and lay him upon his face, dip the sheet into a pail of hot water (which is at the bedside and not in the next room), wring it out as hot as it can be handled. This is spread quickly over the back of the little patient, who is then turned over, and the sheet is secured from the neck to the feet with safety-pins. Both the arms are usually included, but if the child is restless I may leave one hand, and not the arm, exposed. Then the blankets are brought together and pinned in the same way as the sheet, and the child is covered with the bed-clothing.

This dressing is renewed every two or three hours regularly, night and day, for three or four days, according to the severity of the fever: but is not discontinued until the fever has abated and the skin has begun to grow pale. Its renewal requires that two persons should be present— one to remove the old sheet, which is sometimes very offensive, and the other to replace the pack with a clean, fresh one. The hot water should be brought to the bedside, and the patient should not be exposed by going, or being carried into the bath-room, and the wet sheet should not be cooled off by bringing it from a distance.

Some children will cry and worry about being put into the pack, especially if they hear it talked about beforehand; but the rule is that they accept it kindly, and afterward lie down and sleep in it as if it were very grateful. Rather than expose them to the air, I allow the urine to be passed into the pack; but cloths, or a bed-pan, can be used for the bowels without disturbing the sheet and the blankets. Cold drinks are allowed whenever they are desired, but the thirst is so allayed by the pack that these patients require very little to drink.

Clinical Reviews.

DISEASES OF THE EYE AND EAR. By C. H. VILAS, A. M., M. D., Professor of Diseases of the Eye and Ear in the Hahnemann Medical College and Hospital, Chicago, Ill. For sale by Bœricke & Tafel, Chicago.

This little volume is from the pen of our colleague, and is designed especially for students and general practitioners. While highly condensed, it embraces all needed by one who desires to treat the common diseases of these organs, and to make use of the ophthalmoscope, otoscope, etc.

The practitioners who have so often requested the author to write such a volume will find in it all they have desired, while those who feel themselves already skillful will not, we think, lay it down dissatisfied with its perusal.

PERSISTENT HEADACHES, AND HOW TO CURE THEM. By JULIAN J. CHISHOLM, M. D., Prof. of Eye and Ear Diseases in the University of Maryland, etc. etc.

The fact that the monograph upon the above subject is from the pen of an oculist, furnishes the key to the treatment as described in the paper. Popular fads absorb the attention of people for a given time, and the medical as well as the secular press will continue to refer to the fad of the times. Under the various titles of "Reflex Headaches," "Unrecognized Causes of Headaches," "Eye Strain and Its Relation to Nervous Diseases," this subject has been attracting attention of late in the medical press of all schools, at home and abroad; and the treatment invariably suggested has had to do with the eye, the balancing of its muscles, or the correcting of some existing error of refraction.

The clinical points made in this paper are as follows:

"Headache is acknowledged to be one of the most common effects of systemic disturbances. Headaches reflex from disorders of the brain, heart, stomach, liver, kidneys, pelvic organs are easily recognized. But when no inflammatory condition can be found; when the functions are regular; when malaria can not stand the responsibility of

the pain, or the treatment of neuralgia effect its cure; when the headache persists and is especially noticeable after continued use of the eyes; when the degree of discomfort is in proportion to the work accomplished; then it is a safe rule to look to some trouble in the eyes as a cause.

"Unfortunately, the eyes show little disturbance in themselves, and a misleading fact often present is that vision is apparently perfect. But it is not recognized that sharp vision is one thing and labored vision another. There is a difference between the work done and the exertion needful for its accomplishment, and when the accumulation of these extra efforts produces pain, headaches or neuralgia.

"Forced education and the present public school system is blamed for the increase of myopia. The true headache eye is an astigmatic eye, and there are but two remedies—absolute rest for the eyes or correction of the astigmatism by cylindric glasses."

There are, however, other anomalies besides astigmatism which the author might well have added as the possible cause of headaches.

Any error of refraction, whether simple myopia or hypermetropia, is perhaps as common a cause as the more complicated one of astigmatism.

The action of the recti muscles also plays an prominent part in the "reflex neuroses," as proof of which may be cited the numberless articles appearing for the last few years in all ophthalmic journals upon the subject of operative interference upon the recti muscles, for the cure of these same headaches.

Perhaps too little attention has been paid to the subject by general practicioners. Not very long ago oculists were supposed by many to be following a totally different profession from physicians; that the prescribing of an "eye-water" or a pair of glasses was a simple matter. But these present discussions show the intimate relations of the bodily functions and should increase the desire for broader investigation.

The number of people who wear glasses is increasing, but let not the fact be deceiving. Eye defects are not especially on the increase, but the detection and correction of hitherto unrecognized errors of refraction is working out its natural course. Eyes that have seen badly are now made to see well; many headaches and nervous disturbances are avoided or cured.

The scientific consideration and treatment of the errors

of refraction, begun by Donders, of Utrecht, and Landolt, of Paris, is being carefully followed up by American ophthalmologists; the result of this study is shown by the more and more intimate connection between general and special practice. DR. C. GURNEE FELLOWS.

A TREATISE ON DISEASES OF THE NOSE AND THROAT, in two volumes, by FRANCKE HUNTINGTON BOSWORTH, A. M., M. D., Professor of diseases of the Throat in the Bellevue Hospital Medical College, New York, etc. Vol. I.—Diseases of the Nose and Naso-Pharynx, with four colored plates and 182 wood-cuts. New York: Wm. Wood & Co., 1889; pp. 670.

The disciples of St. Blaise, who have just celebrated the anniversary of their patron, should be thankful for the issue of this very clever book, which is at once a credit to the author, the craft and the publishers. Section I. is devoted to the Diseases of the Nasal Passages. Section II. treats of the Diseases of the Naso-Pharynx. Section III. gives the External Surgery of the Nose, with directions for making no less than thirty-three different operations upon that delicate little organ that tradition says is so prone to poke itself into other people's business.

One remarkable feature of this book is that the author has been at infinite pains to collect information from a great variety of sources, to digest the same and to place it where his readers can find it in an available form at a moment's notice.

In many, if not in the most of the medical works that issue from the press in our day, there is a serious lack of that clinical quality which savors of genuine experience and suits the text to the needs of the busy physician. It is not so with this volume, for beside the brief and pointed history of cases that are inserted here and there, we have constant reference to the accumulated observations of those who have gone over this ground before, and who have left us a legacy of resource in the literature of the subject.

Whoever has considered the practical interests of this comparatively new and limited specialty as being in an amorphous state will be undeceived by a perusal of this book; and whoever has supposed that a glance into either of these cavities with the unaided eye was sufficient for diagnostic and therapeutical purposes, will be profited by turning his optics on some of these remarkable illustrations. We shall hope, as will the profession at large, for the early issue of the second and concluding volume.

Miscellaneous Items.

Dr. W. A. Dunn will substitute Dr. H. B. Fellows, and will read a paper on Nasal Stenosis and its Surgical Treatment, at the next meeting of the Clinical Society, Feb. 22d. ——Our readers are indebted to Dr. Lyon, the indefatigable secretary of that society, for the very faithful and interesting report of the discussions that are published in THE CLINIQUE.——Dr. D. S. Smith is in Washington, D. C.——Our good friend, Dr. R. F. Baker, of Davenport, Ia., was another of the victims of the prevailing epidemic.——Dr. H. C. Allen, of the *Medical Advance*, paid a flying visit to a few of his old friends in town last week.——Prof. Gilman has run off to Florida to rest a little from overwork; Prof. Shears is on deck and on duty again; Prof. Laning will give us three lectures on diabetes, the first of which appears in our present issue.——The camphor cigarettes, such as were prescribed by Raspail, the father of the microbian theory, in 1837, for *la grippe*, have also been very useful in some cases during the present epidemic.——After five years of faithful service, Dr. Belle L. Reynolds has resigned the post of Physician to the Home for the Friendless, in this city.——Dr. J. J. O'Connor, the New York specialist in nervous diseases, is prepared to receive a limited number of cases into his own home, at 51 W. 47th St. N. Y.——Dr. N. A. Pennoyer's old sanitarium at Kenosha, Wis., was burned on Sunday, Feb. 2d, before the new and larger one was ready for occupancy.——Prof. Bailey's father is not expected to recover.——Since the Great Fire in Chicago, October, 1871, the Hahnemann Hospital has never been so full of patients as during the present winter; and since the school opened, thirty years ago, there has never been so many students in attendance upon any single course of lectures as are now upon the benches of the "old Hahnemann." ——Dr. Sara E. Bacon has been chosen to fill the vacancy as physician to the Home for the Friendless.——Dr. Washington Epps, of London, kindly corrects our "item" of a month ago, by saying that the hospital in that great metropolis to which we referred as wholly in charge of medical women, is not new, it having been founded in 1872. ——The XXXth Annual Commencement and the Annual Meeting of the Alumni Association of the "old Hahnemann" will occur on Thursday, March 20. Come along.